0913: POST-OPERATIVE STEROIDS IN THE MANAGEMENT OF CAPSULITIS FOLLOWING TMJ ARTHROSCOPY

Nabeela Ahmed, Andrew James Sidebottom. *Nottingham University Hospitals NHS Trust, Nottingham, UK.*

TMJ arthroscopy and arthrocentesis are used in the management of patients who fail to respond to conservative management of TMJ related pain. Around 20% of patients have been found to get clinical improvement initially but subsequently develop marked pain over the joint capsule. In these cases, an intra-articular injection of triamcinolone with marcaine is used to control the pain. This presentation demonstrates the outcome of this management in terms of changes in mouth opening (mm interincisal distance with callipers) and pain (10cm analogue).

Patients presenting 6 weeks following arthroscopy with acute joint related tenderness had pain score and mouth opening measured. They had a 2ml injection containing 40mg triamcinolone with 1ml of 0.5% bupivicaine injected into the joint and reassessed 6 weeks later.

Pain scores improved significantly from an average pain score of 32.8 to 17.3. Mouth opening also improved for the majority by 3mm. 59% improved sufficiently for discharge without further management. 9% subsequently required an open joint procedure

This study confirms the therapeutic benefit of intra-articular steroids in the management of post-operative capsulitis in a limited number of cases. It also suggests that the routine use of intra-operative steroids may not be necessary in 40% of cases.

1156: LATE ONSET TITANIUM CRANIOPLASTY INFECTION CAUSED BY STAPHYLOCOCCUS BIOFILM

Atheer Ujam, Robert Bentley. *Kings College Hospital, London, UK.*

Aims: The role of bacteria growing on biofilms in implant related infection is increasingly reported within the orthopaedic literature.

We report on a male patient who presented with a delayed (4 years) titanium cranioplasty infection following trauma to the head as a result of poor vision due to underlying hemianopia. His previous 3 attempts at other units ended in MRSA infection and plate removal. We investigate the role of biofilm as a possible cause for this recurrent infection and look at the current techniques to prevent biofilm formation.

Methods: We reviewed the microbiological investigations, images history of our case patient. Furthermore, we undertook a literature review of Embase and Pubmed using the key words: Titanium, cranioplasty, delayed infection and biofilm.

Results: Patients with a history of previous MRSA infection of a cranioplasty plate, are at risk of recurrent infection several years post-operatively. Recurrent infection may be caused by release of bacteria adherent to biofilm. No similar cases have been reported.

Conclusions: Our case report suggests that in patients with previous cranioplasty MRSA infection, risks of recurrence are possible despite apparent appropriate prophylactic antibiotics. New mechanisms to prevent biofilm adherence such as anti-adhesive agents may be of benefit in future attempts.

1175: CODING COMORBIDITIES IN MAXILLOFACIAL SURGERY – AN ASSESSMENT OF ACCURACY

Atheer Ujam, Jasmine Ho, Robert Bentley, Kathleen Fan, Christoph Huppa. *Kings College Hospital, London, UK.*

Aims: Clinical coding is a complicated but important process. Professional coders rely on information from medical notes to generate a final Human Resource Group (HRG) which then reflects the final payment for a patient episode.

To assess accuracy of coding, we aimed to compare HRG`s generated by coding personnel to those generated by a clinician from reviewing the medical notes with regards to medical comorbidities.

Methods: A retrospective study of 25 maxillofacial inpatients over 4 weeks. Original patient HRG`s and comorbidites were supplied by the coding department. The medical comorbidites were then recorded by a clinician for the same 25 patients using an electronic database. New HRG`s were then generated to assess for differences in the final HRG as a result of the clinician recording comorbidities.

Results: Recoding by clinicians resulted in 7 (25%) changes to the final HRG, 13 codes added (52%) and 7 changes to comorbidity codes amongst the 25 patients. This resulted in a financial loss for the hospital.

Conclusions: Clinicians need to be more accurate in recording patient comorbidities in order to allow professional coders to process more accurate HRG`s and generate the correct financial payment. The audit is ongoing and more results will become available.

1379: TEMPOROMANDIBULAR JOINT REPLACEMENT SURGERY: A SINGLE SURGEON SERIES IN THE WEST OF SCOTLAND

Ahad Shafi [2], Vici Cook [1], Adrian Scott [2], David Koppel [1]. [1] *Southern General Hospital, Glasgow, UK;* [2] *University of Glasgow, Glasgow, UK.*

Aim: It is acknowledged that the evidence for the long-term efficacy and safety of total prosthetic replacement of the temporomandibular joint (TMJ) is inadequate. It is recommended individual units should audit outcomes against national guidelines, and use the process to inform patients during management and consent for the procedure.

Method: A retrospective casenote audit of 39 patients, who had undergone total prosthetic replacement of their TMJ, between 2004 - 2012 by a single surgeon, was carried out using the standardised British Association of TMJ Surgeons dataset.

Results: This study comprised 18 bilateral and 21 unilateral TMJ replacements (total=57). The commonest preceding diagnosis was osteoarthritis 38% (n=15). The main symptom prior to replacement was pain (n=20). For all cases, the Walter Lorenz Biomet System was used. All patients gave consent based on the NICE guidelines. The main early complications were facial nerve weakness (n=16), skin numbness (n=11), bleeding (n=4), infection (n=3) and dislocation (n=2). Length of stay ranged from 1-13 days (mean=5.4 days).

Conclusions: It is a requirement to validate this relatively recent treatment option and compare outcomes with national standards, allowing an informed judgment of outcomes. The results from this unit are in keeping with provisional findings from the national reports.

1403: A PARADIGM SHIFT IN THE TREATMENT OF MANDIBULAR HYPOPLASIA

Samintharaj Kumar [1], Paul Lloyd G. Coceancig [2]. [1] *UCL Institute of Child Health, London, UK;* [2] *Profilo, Newcastle, Australia.*

Aim: Mandibular hypoplasia includes an associated dental overbite and overjet. Modifications of classical surgical techniques have yet to address universal correction of this hypoplasia in three dimensions ie: breadth, width and height.

We elaborate on a novel surgical technique combined with a patented distractor, which allows correction of mandibular hypoplasia. The orthodontic timing and pattern for this technique is unique in comparison to other forms of classical orthognathic surgery.

Method: A bespoke mandibular distractor (designed by the senior author) is placed on the body of the mandible with vertical osteotomies. The distractor is activated and the distraction callus allowed to mature. 3D Conebeam CT is used toanalyse the 3D changes after surgery and prior to removal of distractors.

Results: At time of abstract submission we have included data of 12 patients. Average age at operation: 168 mths (Range: 140-203 months). Average time with distractors: 37 days (Range: 1-64 days). Average distraction per side: 10.25 mm (Range: 4.5-14.5 mm). Average improvement to ANB post-distraction = 6.9 degrees (Range: 29.7- 1.4). A series of pre and postoperative photographs and CT scans is presented.

Conclusions: This technique seeks to challenge existing paradigms of clinical treatment of mandibular hypoplasia.

1491: AN ANALYSIS OF NON-EMERGENCY REFERRALS FOR MID-FACE FRACTURES TO THE WEST OF SCOTLAND REGIONAL ORAL AND MAXILLOFACIAL SURGERY OUT-PATIENT DEPARTMENT

Niamh O'Connell [1], Richard Taylor [2]. [1] *Glasgow University Medical School, Glasgow, UK;* [2] *Southern General Hospital, Glasgow, UK.*

Aims: To review the accuracy of the referring diagnosis in relation to non-urgent suspected mid-face fractures to the regional West of Scotland Oral and Maxillofacial Surgery Unit from accident and emergency departments.

Methods: A retrospective review of 255 consecutive OMFS out-patient trauma clinic patients referred from Accident and Emergency departments was undertaken.

Patients who had suspected midface fractures, radiographs taken in A&E and who underwent a review in OMFS clinics were selected. Patients who failed to attend, had incomplete records or had additional injuries were excluded. The agreement between the A&E diagnosis, the A&E radiograph report and the subsequent OMFS review was compared.
Results: 103 patients were included. The clinical A&E referral diagnosis agreed with the OMFS diagnosis only 26% of the time while the A&E radiograph report agreed with the OMFS clinical diagnosis on 63% of occasions.
Conclusion: The clinical diagnosis alone by A&E clinicians relating to mid face fractures poorly correlates with the final diagnosis.
A&E Radiograph reports should be taken into consideration by A&E clinicians in diagnosing mid face fractures. We review the findings and injury patterns.

MILITARY SURGERY

0922: VENTILATION STRATEGIES IN ACUTE, SEVERE LUNG INJURY AFTER COMBAT TRAUMA

Thomas Brogden, Douglas Bowley. *Royal Centre for Defence Medicine, Brimingham, UK.*

Aims: Acute Respiratory Distress syndrome (ARDS) is a major challenge in contemporary military critical care. This work explores developments in its management and provides treatment recommendations to assist military practitioners.
Methods: A literature review of ventilatory strategies in post traumatic ARDS patients is presented following the description of a contemporary case.
Results: A combat trauma patient developed ARDS and was evacuated to a definitive surgical facility with the support of an Extracorporeal Ventilatory Support (ECVS) team following the failure of conventional ventilator strategies. Review of the literature revealed improving survival rates for protective ventilation strategies and it is recommended that these be instigated early in ARDS patients. Unconventional strategies are limited by available expertise and resource. Successful use of ECVS in post traumatic ARDS patients is reported, including enabling the evacuation of combat trauma casualties resistant to conventional strategies.
Conclusions: As survivability of major military trauma continues to improve, we are likely to be faced with a small, but increasing number of patients with ARDS refractory to conventional ventilator strategies. ECVS has a place in the management of such patients and can enable the evacuation of ARDS casualties to definitive surgical care facilities.

MISCELLANEOUS SURGERY

0015: IMPROVEMENT IN CLINICAL RECORDING KEEPING FOLLOWING THE INTRODUCTION OF AN ADMISSION CLERKING PROFORMA FOR ACUTE GENERAL SURGICAL PATIENTS

Shradha Gupta, Kumaran Ratnasingham, Veena Bhargava, Nick West. *Epsom and St Helier University Hospital, Carshalton, UK.*

Aim: Accurate record keeping, safe handover and optimising management of acute surgical patients has reached a consensus with the publication of the Handover Guidance and the Emergency Surgery Standards by the RCSEng. This novel audit assesses the improvement in accuracy and consistency of clerking following implementation of a proforma for acute surgical admissions.
Methodology: Surgical admission clerking notes of 100 patients presenting acutely to a district general hospital were audited against standards of excellence derived from the Royal College of Surgeons Handover Guidance, Emergency Surgery Standards and the Royal College of Physicians Record Keeping Standards. A proforma was constructed and implemented across the unit. A further 100 patient notes were re-audited to assess the effect of the clerking booklet on improving documentation.
Results: The proforma significantly improved documentation ($p<0.05$). Completion of venous thromboembolism risk assessment increased by 62% ($p<0.001$). Time taken until senior review of the patient post-admission, which occurred in an average of 5.23 hours, improved by 2.53 hours.
Conclusion: Implementing an admission surgical proforma significantly improved documentation and standardised the information recorded for patients admitted in the acute setting improving patient safety. It can be used as a future tool to allow units to audit their delivery of care against the national standards.

0023: THE TIP OF THE ICEBERG: 'SHARPS' AND 'SPLASH' INJURIES IN SURGICAL PRACTICE

Olivia Will [1], Sarah-Jane Lang [2], Neil Keeling [3]. [1] *Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK;* [2] *Cambridge University Medical School, Cambridge, UK;* [3] *West Suffolk Hospital NHS Foundation Trust, Bury St Edmunds, UK.*

Background: Accidental exposure to body fluids (AEBF – 'sharps' or 'splash' injuries) can result in disease transmission between patient and clinician. Clinicians receive post-exposure prophylaxis (PEP) and seroconversion testing after reporting exposure. This study evaluated the actual versus reported incidence of AEBF amongst surgeons, explored the reasons for non-reporting, and assessed knowledge of first aid and reporting procedures.
Methods: Anonymous questionnaires were administered to 11 surgical consultants, 8 registrars, 9 junior doctors and 2 surgical practitioners at a district general hospital.
Results: In one year there were 35 sharps injuries in 30 clinicians. Of these, 15 received first aid, and 6 were reported. There were 38 'splash' injuries of which 17 received first aid, and 1 was reported. The most frequent reason for non-reporting was 'the injury was too trivial'. Only 6 clinicians correctly answered all questions on first aid, while 19 correctly answered those on reporting procedures.
Conclusion: There is a significant annual incidence of AEBF amongst surgeons but most are unreported. Clinicians have good knowledge of reporting procedures, but fail to report exposure, seemingly assessing risk as low. Knowledge of first aid could be improved. This incidence of unreported AEBF may have safety implications for patients and surgeons.

0027: STANDARD OF RANDOMISED CONTROLLED TRIAL REPORTING IN APPENDICECTOMY

Emma Saunsbury [1], David McGowan [1,2]. [1] *Brighton and Sussex Medical School, Brighton, UK;* [2] *Gloucestershire Hospitals NHS Foundation Trust, Gloucestershire, UK.*

Aim: To assess the quality of reporting of randomised controlled trials (RCTs) involving open versus laparoscopic appendicectomy published from 2001 to present, using criteria specified by the CONSORT statement, adherence to the CONSORT flow chart and the Jadad scale.
Method: All RCTs on appendicectomy published since 2001 were reviewed, and those on the subject of open versus laparoscopic appendicectomy selected. Reporting quality was then systematically assessed using a modified checklist of CONSORT statement items, adherence to CONSORT flow chart guidelines and the Jadad scale.
Results: Of the 28 RCTs analysed, only four (14.3%) achieved 50% adherence to the CONSORT statement, with one report scoring 19%. Only 64% of trials were identified as RCTs by their title. Whilst 61% reported their method of generating a random allocation sequence, only 39% stated its implementation method. The majority of authors reported a clear pathway for trial participants, with 16 adhering to the CONSORT flow chart guidelines. However, only 57% (16 out of 28) of trial reports achieved a Jadad score of $>3/5$.
Conclusions: Despite the growing volume of RCTs on appendicectomy, the quality of trial reporting remains inadequate. Greater consideration of the CONSORT statement is needed to increase awareness of optimal reporting practice.

0039: PREOPERATIVE ASSESSMENT AND NEW VALVULAR HEART DISEASE: DO ECHOCARDIOGRAMS CHANGE MANAGEMENT?

Edwin Selvaratnam [1], Jennifer Mack [2], Victoria Thomas [2], Gethin Williams [3]. [1] *Kings College London, London, UK;* [2] *Cardiff Medical School, Wales, UK;* [3] *Royal Gwent Hospital, Wales, UK.*

Background: The majority of surgical patients do not require referral to the consultant led anaesthetic clinic and are suitable for nurse led pre-admission clinic. Current policy advises an echocardiogram and an anaesthetic review for patients presenting with an undocumented heart murmur during preoperative assessment. To aim was to explore current preoperative guidelines, specifically whether an echo alters management.